REMARKS

By this amendment, claims 2-5 and 9 have been canceled, claims 1, 6-8 and 10 have been amended, and new claims 11-33 have been added. Accordingly, claims 1, 6-8, and 10-33 are pending in the present application.

Claims 1-10 have been rejected under the judicially created doctrine of double patenting over the claims copending U.S. Patent Application Nos. 09/536,278 and 09/536,383.

Claims 2-5 and 9 have been canceled and claims 1, 6-8 and 10 have been amended. As amended, the claims in the present application are of different scope than the claims of the '277 and the '278 applications. Applicants respectfully submit, therefore, that this ground of rejection has been overcome, and withdrawal of the same is courteously requested.

The specification has been amended to include the reference numerals of the drawings identified in the Office Action. With respect to reference numerals 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, and 80 from Fig. 8 as listed in the Office Action, however, Applicants respectfully note that each of these reference numerals are discussed in the specification from page 17, line 15, through page 18, line 7, as amended. In view of the foregoing, Applicants respectfully submit that the drawings are fully compliant with 37 C.F.R. 1.84(p)(5), whereupon withdrawal of the objection to the drawings is respectfully requested.

Claim 8 has been objected to as containing a typographical error. Applicants thank the Examiner for pointing out this error, and have corrected the error as suggested in the Office Action. In light of such amendment, Applicants respectfully request that this objection be withdrawn.

Claims 1-10 have been rejected under 35 U.S.C. 102(b) as being anticipated by the book entitled A Guide to the Project Management Body of Knowledge, by the Project Management Institute, edited by William R. Duncan, pub'd. 1996, hereinafter referred to as "Duncan."

Duncan fails to teach, or even suggest, each and every feature of the invention as claimed in the present application. Among the many features of the claimed invention which are not taught or suggested in Duncan, for example, is the automatic project updating module claimed in independent claims 10 and 29, and the real time capturing and updating of project status information as claimed in independent claims 1 and 24.

Additionally, the term "tasking horizon" as used in the claimed invention is also not met by Duncan. The term "tasking horizon" is described in the present application as being "designed to be a realistic planning window that corresponds to the length of time most employees can plan their work" (specification, p. 6, lns. 7-12; p. 11, ln. 23 through page 12, ln. 10). The reason for this is that "the most effective planning is generally limited to a predetermined period of time, which is likely to be much smaller than the project time period." (*See* specification, p. 11, ln. 24 – p. 12, ln. 2). Thus, each tasking horizon is a fixed window of time within which any of a plurality of tasks dates can be scheduled into or removed therefrom (*see, e.g.*, specification, p. 15 - p. 16).

The present invention then analyzes the movement of task dates into and out of the relevant tasking horizon to assess the accuracy with which the estimated dates were predicted. In other words, the progress of the various tasks in a project is measured with respect to this planning window. As such, the period of time encompassed by a tasking horizon is necessarily a window of time which is independent of any specific task in the project.

The Office Action, however, redefines the term "tasking horizon" in a manner which is not supported in the present application. Specifically, the Office Action redefines the term to be "the duration of time included in the planned time span **defined by the**

task start and stop dates." (Office Action, p. 4, item 8). This "definition" of the term is not found anywhere in Appellants' specification.

Moreover, the definition of the term "tasking horizon" provided in the Office Action is nonsensical when used within the context of the specification and the claims, and essentially renders the term useless. The specification describes a process of assigning the tasks which are expected to be performed during a specified tasking horizon. For example, the description states that "[t]he final step is to assign the tasks 20 that occur during the tasking horizon .... Each day, or at set intervals, the system ... assigns tasks that fall within the next tasking horizon." (Specification, p. 13, lns. 20-24, *inter alia*). Also, the specification discloses that a "churn capturing process," which is a key component of the present invention, is "triggered when task dates appear, vanish, and/or move into or out of a current tasking horizon" (specification, p. 15, lns. 1-2).

If a tasking horizon is defined by the start and stop dates of a task, as proffered in the Office Action, how can a task be assigned to occur within a tasking horizon, if the tasking horizon **is**, by definition, the period of time encompassed by the performance of the task? Moreover, it is impossible to move a task date into or out of a tasking horizon if the time span of the tasking horizon is defined by the task date itself. Based on the definition contained in the Office Action, any movement of a task date would serve to shift the tasking horizon as well.

The Office Action indicates that the "tasking horizon" as recited in Applicants' claims is met by section 3.3.2 and p. 170 in Duncan, *i.e.*, the disclosed terms "target finish date and schedule development" (*e.g.*, Office Action, p. 5). However, these cited passages only teach the determination of predicted start and stop dates of project activities, which corresponds to the definition of the term "tasking horizon" relied upon in the Office Action, *i.e.*, the incorrect definition of "tasking horizon." When the passages in Duncan cited in the Office Action are considered in light of the actual meaning of the term "tasking horizon," it is readily apparent that the cited passages do not anticipate or render obvious the claim element of "activating" or "selecting a tasking horizon."

The term "verbs" is another example of an element in Applicants' claims which are not taught or suggested in Duncan. As used in the present invention, "verbs" are part of a predefined and structured set or sets of words and phrases (or reasons) that have been programmed into the modeling system of the present invention. (Figure 4; specification p. 11 – p. 13, *e.g.*). This aspect of the term is demonstrated in the description of the invention and shown in the accompanying drawings. For example, Applicants' specification describes the inventive system as including the following processes:

"Once the tasks in a project have been determined, the next aspect of the present invention is the planning of the tasks" (p.11). Next, the scheduling of the tasks are described. Then, "[t]he next step is to assign verbs [ ] 18 to each task" (p. 12, ln. 22).

This process sequence is visually summarized in FIGURE 4, which shows a flow chart of an "employer task assignment stage" of the invention. As can be seen in FIGURE 4, the step of "selecting verbs" 18 occurs after the step of identifying a tasking horizon 16, and before the step of "assigning tasks" 20 to specific workers to perform the tasks. Organization of the pre-selected "verbs" into sets is discussed in Applicants' specification on page 13, for example.

In light of the above, it is readily apparent that the term "verb" as used in the present invention requires the words and phrases constituting the "verbs" to be part of a predefined, structured set or sets of words and phrases selected during the planning stages of the project.

The Office Action assert that the "verbs" as recited in Applicants' claims are met by section 4.3.3.3 in Duncan (*e.g.*, Office Action, p. 6). Section 4.3.3.3 in Duncan (p. 46) states that "[t]he causes of variances, the reasoning behind the corrective action chosen, and other types of lessons learned should be documented so that they become part of the historical database for both this project and other projects of the performing organization." The rationale for this rejection is that "verbs and language are encompassed by lessons learned" (Office Action, p. 5). The "lessons learned" in Duncan, however merely reflect

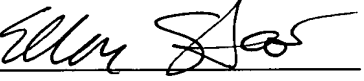
the generalized concept and goal of learning from the past, and is not restricted to selecting reasons or explanations for performance successes or failures from structured sets of words and/or phrases. In fact, nowhere in the cited section of Duncan, or, for that matter, anywhere in Duncan is there any suggestion of a set or sets of predetermined, structured words or phrases selected during a planning phase of the process.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Dated: November 27, 2002

Respectfully submitted,

By 

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Version With Markings to Show Changes Made

In the Specification

Replacement for the paragraph beginning on page 3, line 11:

Although the AIMS and TES systems facilitate managing projects in a large company, project planning and managing is nevertheless relatively complex in most circumstances. To further facilitate project management in large companies, commercially available software has been developed. One available management tool or product is conventionally known as Microsoft Project from Microsoft Corp., and another product is ABT Project Workbench from the Applied Business Technology Corporation. These software tools allow companies to define project plans in accordance with tasks and time schedules for available personnel resources, and are [arc] typically operated in stand-alone fashion or in conjunction with other commercially available [table] software products for facilitating the overall management of projects. However, these commercially available products are designed for specific applications and are [arc] therefore limited in capability, as well as having no built in capability for managing project funding such as the CPAR example introduced above.

Replacement for the paragraph beginning on page 3, line 25:

An example of such previously disclosed systems include United States Patent No. 5,111,391, which describes a staff scheduling data processing system and which

method schedules staff and management personnel at locations remote from a central location by applying central location policy to unique remote location data to insure the optimum staff schedule for each remote site.

Replacement for the paragraph beginning on page 4, line 6:

United States Patent No. 5,767,848 describes a development support system for supporting new product development activities, which includes a target storage for storing [stormg] target values of schedules of product development, and the cost and the performance of the product; an estimating unit for estimating schedules of product development and the cost and the performance of the product on the basis of the models stored in the model storage. The '848 patent includes a unit for monitoring electronic mail necessary for carrying out tasks essential to the development of the product, extracting information relating to the progress of tasks essential to carrying out the development of the product, and providing the members of the development project team with information about the progress of the tasks.

Replacement for the paragraph beginning on page 4, line 16:

United States Patent No. 5,765,140 describes a dynamic project management system which includes a server network and a master database.

Replacement for the paragraph beginning on page 4, line 18:

United States Patent No. 5,692,125 describes a scheduling system, wherein events and/or groups of events are checked at a scheduling time to insure that certain fixed conditions associated with the event(s) are satisfied.

Replacement for the paragraph beginning on page 5, line 11:

The present system recognizes that certain factors that affect [effect] planning and management are incapable of being quantified on a macro level and must be incorporated into the planning process on a micro level. The present system recognizes that the best knowledge of how productive or efficient an individual employee will be over a given time period is likely to rest with that individual employee.

Replacement for the paragraph beginning on page 5, line 23:

Thus, the present-system has several stages. Individual employees are permitted to be individuals and plan their work as individuals. Individuals are only asked to plan their work within a limited tasking horizon. Employees track their progress using verbs that are designed to capture the reasons behind positive and negative predictive ability. Verbs are analyzed and expected predictive error, also known [know] as risk, is calculated. Once verbs are captured, they can be analyzed for ways to improve predictive ability. In addition, the risk can be factored into the initial planning stage so as to include an expected

predictive error in the initial planning. Tasks may also be analyzed and linked to other tasks to account for inherent related task risk.

Replacement for the paragraph beginning on page 6, line 13:

Next, verbs are selected that capture the types of dialogues that an employee faced with the task may use to describe their progress. Verbs are meant to capture generalized categories of dialogue that workers would routinely engage in if they were each interviewed on a routine basis throughout a project. For example, verbs may be selected to provide a[s] series of potential answers to a standard question, such as "why do you think you performed this task faster or slower than estimated?" In one embodiment, verbs can be broken down into employee dependent verbs (health, mental well being, etc.), task related verbs (new computers not working, etc.), environmental verbs (snow, etc.) or in any number of ways. Verbs are used to categorize and classify employee responses to assist in maximizing predictive ability.

Replacement for the paragraph beginning on page 9, line 13:

The present invention can be run on an internal network as shown in figure 1 or over an external network (including the Internet) as shown in figure 2. Employees are connected to a network database 5 through the use of PCs or workstations 1, 2, 3 [a PC]. A manager is also connected to the network database 5 through a PC or a workstation 4. Those of ordinary skill in the art will understand that a PC with a Pentium processor, 16

megs of RAM, a 5 meg hard-drive, an operating system (such as Windows '95 or higher) and a 56k modem or network connection are adequate to implement the present invention. In its most basic embodiment the entire system can be provided on a single PC with a Pentium processor, 64 megs of RAM, a 5 GB hard-drive, an operating system (such as Windows NT or similar operating system) that multiple users [user's] have access to. Likewise, in a hardwired embodiment, similar components may be provided in a hardwired form.

Replacement for the paragraph beginning on page 9, line 24:

Another implementation involves web server software running on a server that is used to produce an external network configuration. As shown in figure 2, workstations 1, 2, 3 and 4 are connected to an external network, such as the Internet 6[, is provided]. A server 7, such as a Netscape ES server is provided that is operationally connected to a workstation 8, such as a Sun Microsystems Workstation. Based on these two types of network configurations, the database 5 may be provided either externally or internally to one or more of the PCs or workstations 1, 2, 3 and 4.

Replacement for the paragraph beginning on page 14, line 4:

As shown in figure 5 after a task 24 has been assigned, the task needs to be scheduled 22. Scheduling is accomplished by having the employee, or in some embodiments the employer, assign start and stop dates 26. Although the present invention is described with respect to start and stop dates, those of ordinary skill in the art will

recognize that the invention may be implemented using a start date and a number of working hours or in any other time and work measurement system, such as a start date and cost. The start and stop dates set the standard against which the scheduler's planning abilities are measured. It is also expressly contemplated that a default start and stop date may be provided with the task that the employee may modify.

Replacement for the paragraph beginning on page 14, line 20:

The verb is used to classify the reason[s]for churn, or in other words the reason for why the task was performed as planned or not performed as planned. Churn may be broken down into start churn, completion churn, time churn, cost churn or any other variety. Churn is simply a measure of the relative predictive ability of the employee in relationship to one or more tasks. Churn may be a composite figure or an index of one particular type of ability.

Replacement for the paragraph beginning at page 15, line 13:

- Complete dates may not precede start dates of the[-] same type.

Replacement for the paragraph beginning on page 18, line 1:

If the employee chooses to view tasks 80, the system retrieves the tasks assigned to that employee 66 and displays them 68. If a[the] task is new 70, the employee is

provided with an[the] ability to set the anticipated start and stop date 78 for the new task. If the tasks are [is an] existing tasks [74], the employee may update his or her [their] progress 72 on any of the tasks 74 by entering an actual start or stop date. In addition, for each task trial receives a data input, the employee is requested to enter a verb and/or to select a verb from a predetermined list 76. The logic diagram is ended at 81[82].

Replacement for the paragraph beginning on page 18, line 8:

Determining why tasks are [arc] not performed as planned is one of the goals of the present invention. When tasks arc not performed as planned they are classified as churn. The verbs that are associated with the reason for the churn can then be analyzed to determine what if anything the employer can do to either minimize the churn or anticipate its occurrence.

Replacement for the paragraph beginning on page 18, line 19:

Churn can be analyzed on many different levels. Churn may be calculated by task, by task type, by employee, by groups of employees, etc. Churn is monitored on multiple levels to help identify why the churn occurred 38. Churn helps identify what an employer can do to reduce churn and also helps the employer recognize what churn it will never be able to reduce. By quantifying churn, the employer may optimize the working environment while at the same time quantifying the intangible variable that force tasks and projects to be completed in a manner other than what was predicted.

Replacement for the paragraph beginning on page 19, line 1:

When churn is encountered, it is important to know [if] the reason for the churn and whether it has anything to do with the task itself or the individual who performed the task. The verb associated with the positive churn rate is analyzed to determine what if any effect it should have on an assigned risk factor 40.

Replacement for the paragraph beginning on page 19, line 21:

The verbs associated with the churn are important in [is] assigning task risk values and in deciding whether there is anything that an employer can do to minimize the churn. For example, if the same worker takes 6 days to do an "install" but identifies a family emergency (personal reason) for the delay, the risk factor assigned to the task may not be modified at all. The reason for the churn is employee based and not task based. The employee's risk factor may also only be effected if the incident rate of family emergencies experienced by the worker exceeds some predetermined norm. Thus, if the employee experiences a 10% greater likelihood of having personal emergencies and on average workers'_ schedules are affected [effected] by personal emergencies in 10% of the tasks that are performed, the worker may have a 1% increased risk factor (10% additional risk of a 10% norm) of incurring churn. If the worker's churn is 1[I] day and the risk factor is 1%, the worker may have a .01 day increased risk.

Replacement for the paragraph beginning on page 20, line 12:

Because the present invention mirrors how people actually work, it may use Human Resource (HR) data to assist in predicting likely work patterns. In an alternate embodiment, the churn and risk assessment is made in combination with the employee's human resource data and/or any other data that the employee is willing to share. Events, hobbies, children, family obligations as well as other significant events that can be quantified can be worked into the churn/risk calculation. An employee's risk may fluctuate in relation to trackable events and assigned accordingly. For example, a risk factor may increase or decrease for an employee with children during known vacation periods. When children are home during vacations, depending on the family situation, the employee's risk value may increase or decrease. Thus, if an employee's personal profile indicates that they have children, the children's vacation can automatically be factored into the churn/risk calculations. Likewise, other commitments, whether the employee is on a sports [sport's] team or predictable event, such as vacation, can be used to identify churn patterns and optimize risk calculations. The net effect of this type of risk analysis is that the employer can capture the intangible reasons for churn and make realistic decisions about how long tasks will take.

Replacement for the paragraph beginning on page 21, line 3:

Another important advantage of the system is in identifying employees with below average intangible churn i.e., employees [. Employee's] who work equally hard

regardless of other commitments or events. The employer may use risk management to ensure that employees [employee's] do not overwork themselves and take appropriate time off.

Replacement for the paragraph beginning on page 21, line 12:

Tasks are first extracted 86 and the associated churn and verbs are determined 88. The churn is classified as positive or negative 90. The verb, that is, the reason for the churn, is then analyzed 92. If verb categories are used, the verb can first be compared to the known employee dependent verbs 94. If the verb is employee based, in other words, unique to that employee, the verb is compared to an expected norm value, and a risk factor is assigned 96. The risk factor is recorded in a database 98 and, if necessary, an overall risk factor is modified 100 for the employee. If the churn is not employee dependent 94, the churn is next analyzed to determine if it is task related 102. If the churn is task related, the churn is compared to a norm and assigned a weight 110, and the information is recorded 112. Likewise, the overall risk factor associated with that task may be modified 114. If the churn is not related to the employee or a particular task, it is classified as environmentally related 104. The churn is recorded 106, and the overall environmental risk factor associated with environmental related churn is modified 108. If another task/churn requires analyzing 115, it is sent through the same process until the program ends 116.

Replacement for the paragraph beginning on page 21, line 1:

One of the main goals of the present system is to assist in the planning stage, before tasks are assigned. Therefore[Therefor], a predictive management system 42, as shown in figure 7, is designed to assist in identifying how long a project, composed of multiple tasks, will take and predict the risk (unexpected time variations) involved with the project.

Replacement for the paragraph beginning on page 22, line 10:

The predictive management system then looks for direct and indirect matches amongst the data and compiles the risk 50. For example, if one or more employees have performed a task that is part of the project, the time period that the task will likely take to perform can be estimated. If direct task matches are not possible, the system can nevertheless use employee based risk and/or environmental risk to estimate the non-task dependent risk that the project is likely to encounter. The system can also compare employee bases and extrapolate predictive information. Graphing of risk factors can also be used to extrapolate risk factor trends that are [arc] other-wise not captured by the current system.

Replacement for the paragraph beginning on page 22, line 19:

Risk may be calculated for a project as a whole, for given time periods or for given tasks. This provides [permits] the employer with general predictive information and

the ability to identify the most likely place in a project where it will have the greatest likelihood of encountering problems. Staffing decisions and realistic goals can thus be set by management before tasks are assigned to groups or individual employees.

Replacement for the paragraph beginning on page 23, line 1:

One example of a predictive management center 118 is shown in figure 10. Tasks are identified 120 along with available employees 122. Environmental risk factors 124 and e[E]ach employee's risk profile are[is] extracted 126 from a database. Next, the tasks that will need to be completed are compared against the tasks that the employees [employee's] have performed in the past 128. Environmental and employee personal risk is added 130 and an average time for each task is computed together with a composite risk factor 132. Tasks that do not have a direct match 134 are identified and [either] an estimation is made by the operator as to how long each unmatched task should take to complete 136. Employee and environmental risk factors are added, together with the operator's new task predictive risk factor 138. A total completion time and project risk factor is then generated 140.

Replacement for the paragraph beginning on page 24, line 4:

Another feature of the present invention relates to the ability to capture task data and automatically update the project status based upon the captured data. Figure 11 provides a block flow diagram of an automatic project updating system 400. The

automatic project updating system 400 is comprised of a task data processing system 410 and various mediums which may provide data such as a computer 420, phone or fax machine 430, copier 440, laptop or similar device (i.e. palm pilot) 450, cell or wireless phone 460, or any other medium which may provide data. As the various mediums are used by personnel, the task data processing system 410 automatically collects verb and object data.

In the Claims

1. (Amended) A method for ~~planning tasks~~monitoring and managing a project, comprising the steps of:

breaking a current project into a plurality of tasks, wherein the status of said project is tracked on the basis of at least one task related event for each of said plurality of tasks;

~~selecting~~setting a tasking horizon based on a predetermined time interval;

~~selecting~~associating at least two verbs ~~for~~with said at least one task related event for each of said plurality of tasks;

receiving a respective predicted ~~start~~ date for ~~said~~ at least one task related event;

receiving ~~an~~a corresponding actual ~~start~~ date for each~~said at least one~~ task related event for which a predicted date was received;

for each actual date received, receiving a verb associated with the respective task related event, said received verb being one of said at least two verbs ~~that corresponds to said actual start date~~;

~~comparing said predicted start date said actual start date~~; and

~~computing churn of said at least one task~~

capturing at least the predicted dates, actual dates and verbs received for each of said task related events and automatically updating the project status based on the captured information, to thereby provide accurate and real time data regarding said current project and said plurality of tasks of said project.

6. (Amended) The method ~~as claimed in~~according to claim 11, further comprising the step of:

computing a risk factor for at least one of said plurality of tasks based on data of at least one of ~~in part on~~ said computed churn and said received verb, said data corresponding respectively to said at least one of said plurality of tasks.

7. (Amended) The method ~~as claimed in~~according to claim 1, further comprising the steps of:

comparing said plurality of tasks of said current project to ~~previously performed~~a plurality of tasks of at least one past project;

extracting previously performed task completion data for said plurality of tasks for said at least one past project; and

computing an expected task completion time for at least one of said plurality of tasks of said current project based at least in part on said previously performed task completion data.

8. (Amended) The method ~~as claimed in~~according to claim 1, further comprising the steps of:

comparing said plurality of tasks of said current project to ~~previously performed~~a plurality of tasks of at least one past project;

extracting at least one risk factor associated with said ~~previously performed~~ plurality of tasks of said at least one past project;

and computing ~~an~~ risk factor for at least one of said plurality of tasks for said current project based at least in part on said extracted at least one risk factor.

10. (Amended) An apparatus for ~~planning task~~monitoring and managing a project, comprising:

a management module for breaking a project into a plurality of tasks, ~~selecting~~for setting a tasking horizon and for assigning at least two verbs for at least one of said plurality of tasks;

~~a~~at least one task assignment station for receiving information of said at least one task, ~~and~~ for entering a respective predicted ~~start~~ date for each of at least one task related event relevant to the performance of said at least one task, ~~and~~ for entering ~~an~~ a respective actual ~~start~~ date for each of said at least one task related event, each actual date corresponding to a respective predicted date for one task related event, and also for entering a selected one of said at least two verbs for each actual date entered;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives predicted ~~start~~ dates and ~~said~~ actual ~~start~~ dates entered at said task assignment station ~~and computes a churn~~; and

an automatic project updating module for capturing at least the predicted dates, actual dates and verbs received for each of said task related events and automatically updating the project status based on the captured information, to thereby provide accurate and real time data regarding said current project and said plurality of tasks of said project.